

Case Report

Madura's foot in a renal transplant patient: report of a case

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Abstract

A 40-year-old kidney transplant male recipient was hospitalized for chronic abscess of the right foot in a context of immunodepression. The patient came from Djibouti and was in Belgium for a few days. He presented a right foot with a swelling localized on the first metatarsophalangeal joint which was excoriated (Figures 1 and 2) and was self-treated ineffectively with various local antiseptics for several months. He was in the operating room for an open biopsy done by plantar and dorsal approach to confirm the fungal infection. Treatment was not started with oral itraconazole because of the good evolution of the lesion. Pain diminished after a few days, and the patient was able to walk after a few weeks.

Keywords: actinomycetoma; eumycetoma; Madura's foot

Introduction

Mycetoma is a chronic pseudotumorous infection of the skin and subcutaneous tissue, caused by fungi (eumycetoma) or bacteria (actinomycetoma), and generally inoculated traumatically. Mycetoma is usually localised to the foot and principally occurs in tropical and subtropical regions. We describe here the case of eumycetoma of the foot in a patient who has had a renal transplantation previously and also had a history of tuberculosis.

Case report

We report the case of a 40-year-old man who hurt his right foot a few months before in the tropics. He presented himself to the hospital for chronic abscess of the right foot. His medical history revealed that he has previously undergone renal transplantation and has suffered from tuberculosis. The patient came from Djibouti and was in Belgium for a few days. He presented a right foot with a lesion localised on the first toe which was swollen and excoriated (Figures 1 and 2) and was self-treated ineffectively with various local antiseptics for several months. The patient had trouble walking and could not wear shoes because of violent pain. X-ray scans revealed no periosteal reaction. The ultrasound of the right foot showed inflammation involving the first metatarsophalangeal

joint and a plantar abscess of $3 \times 0.8 \times 2.3$ cm that extended later to the dorsal part of the joint. Ultrasound examination suggests the diagnosis of mycetoma involving lymph nodes.

An open biopsy was done in the operating room by plantar and dorsal approach. Three nodules in the plantar part and six nodules on the dorsal part were found. The role of lymph nodes dissemination was not excluded.

Histologically, the specimen consisted of inflammatory tissue containing lymphocytes and polymorphonuclear neutrophils. Direct examination and culture revealed fungus, but the precise identification was impossible. The decision to not treat with oral itraconazole was taken because of the favourable evolution of the foot. Pain diminished after a few days, and the patient was able to walk after a few weeks.

Discussion

About 23 cases of eumycetoma due to *Fusarium* species have been reported in immunosuppressed patients [1]. The patients' origins were the tropics. Morphological identification of the *Fusarium* genus was often difficult, and species-level identification was only achieved in eight cases.

Classically, identification is based on the white–yellowish colour of the grains, the light brown colonies and genus characteristic sickle-shape spores [2]. Five cases of mycetoma due to *Fusarium Solani* have previously been reported [3]. Development of molecular technology could potentially influence care and improve clinical treatment decisions [4].

Fusarium species are cosmopolitan fungi, which are thought to be inoculated into the skin by penetrative trauma [5]. Our patient with a recent history of foot injury probably acquired the infection in Djibouti.

Medical treatment of fungal mycetoma is usually disappointing. In our case, surgical excision was effective without high dose of oral itraconazole. The clinical evolution was successful and the patient was able to walk after a few weeks.

Conflict of interest statement. None declared.

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Fig. 1. Lateral view of the patient's right foot at initial presentation.



Fig. 2. Closer view of the patient's right foot showing nodules and excoriated wound.

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